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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/560,774

12/14/2005

Fabien Schweighoffer

BJS-3665-167

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23117 7590 10/14/2009  
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EXAMINER

JAVANMARD, SAHAR

ART UNIT

PAPER NUMBER

1627

MAIL DATE

DELIVERY MODE

10/14/2009

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/560,774	SCHWEIGHOFFER ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	SAHAR JAVANMARD	1627	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 31 July 2009.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 12-14 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 12-14 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>7/31/09</u> .   | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Status of the Application***

This Office Action is in response to applicant's arguments filed on July 31, 2009. Claim(s) 12-14 are pending and are examined herein.

### ***Response to Arguments***

Applicant's arguments with respect to the 103(a) rejection of claims 7 and 11-14 as being unpatentable over Ikhlef et al. (US Pub. No. 2003/0064374 A1) in view of Dalton et al. (WO 95/11887) has been fully considered and said rejection is hereby withdrawn.

In response to Applicant's contention that "the results presented in the present application are unexpected because, for example, they rely on a previously unknown mechanism of action of etazolate, not previously foreseen or predicted by the cited art, namely the modulation of GABAA receptor causing sAPPalpha production". In response to this argument, Examiner respectfully notes that "[T]he discovery of a previously unappreciated property of a prior art composition, or of a scientific explanation for the prior art's functioning, does not render the old composition patentably new to the discoverer." *Atlas Powder Co. v. Ireco Inc.*, 190 F.3d 1342, 1347, 51 USPQ2d 1943, 1947 (Fed. Cir. 1999). Thus the claiming of a new use, new function or unknown property which is inherently present in the prior art does not necessarily make the claim patentable. *In re Best*, 562 F.2d 1252, 1254, 195 USPQ 430, 433 (CCPA 1977).

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Furthermore, the claim recites a method of treatment, the mechanism by which it is achieved is not given patentable weight and is not a part of the search. As set forth on record, Ikhlef teaches the administration of etazolate in the treatment of Alzheimer's disease. Although the reference is silent on cognitive perception, one of ordinary skill in the art would expect with a reasonable degree of success to also try the regimen to treat the cognition aspect of Alzheimer's disease. In order to further justify that such an expectation is reasonable, a new rejection is set forth on record in the office action below.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 12-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ikhlef et al. (US Pub. No. 2003/0064374 A1) in view of Schumcher et al. (US Patent No. 7,153,871 B1).

Ikhlef teaches treating neurodegenerative diseases, including ALS and Alzheimer's disease with the use of etazolate, which is a PDE4 inhibitor (page 4, [0056]; claims 9, 12-14, and 17).

Ikhlef teaches that etazolate may be administered by any method known in the art preferably injection, namely the intravenous route (page 4, [0058]).

Ikhlef does not specifically teach treating cognitive deficits or the monitoring thereof.

Schumacher teaches a class of aminoindazole and aminobenzofuran analogs as a method of treatment that involves the inhibition of PDE4 enzymes. The invention includes methods of selective inhibition of PDE4 enzymes in animals, e.g., mammals, especially humans, wherein such inhibition has a therapeutic effect, such as where such inhibition may relieve conditions involving neurological syndromes, such as the loss of memory, especially long-term memory (column 2, lines 29-36).

Schumacher teaches the condition of memory impairment is manifested by impairment of the ability to learn new information and/or the inability to recall previously learned information. Memory impairment is a primary symptom of dementia and can also be a symptom associated with such diseases as Alzheimer's disease, schizophrenia, Parkinson's disease, Huntington's disease, Pick's disease,

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Creutzfeld-Jakob disease, HIV, cardiovascular disease, and head trauma as well as age-related cognitive decline (column 2, lines 41-49).

Dementias are diseases that include memory loss and additional intellectual impairment separate from memory. The present invention includes methods for treating patients suffering from memory impairment in all forms of dementia.

Dementias are classified according to their cause and include: neurodegenerative dementias (e.g., Alzheimer's, Parkinson's disease, Huntington's disease, Pick's disease), vascular (e.g., infarcts, hemorrhage, cardiac disorders), mixed vascular and Alzheimer's, among others column 18, lines 50-55).

Schumacher teaches two methods of monitoring cognitive improvement upon administration of the PDE4 inhibitors, including *in vivo* testing for learning and memory 1) passive avoidance in rate, 2) radial arm maze task (column 26, example 11, methods A and B)

It would have been obvious to one of ordinary skill in the art at the time of the invention to have treated Alzheimer's disease with the administration of etazolate, as taught by Ikhlef and also treated perceptive cognition. The motivation, provided by Schumacher, teaches that PDE4 inhibition is employed as a method of treatment for neurodegenerative dementias, namely Alzheimer's disease, to improve loss of memory, especially long term memory. Thus, it would have been obvious to one of ordinary skill in the art to have expected, with a reasonable degree of success that a PDE4 inhibitor, namely etazolate, which is effective in treating Alzheimer's disease, can also be employed to improve cognition based on reasons of record. One would expect that

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because both classes of compounds are PDE4 inhibitors and employed to treat Alzheimer's disease that one of ordinary skill in the art would expect, with a reasonable degree of success, that the former, namely etazolate, would also be an obvious candidate, to at least try, as a method of improving the cognitive aspect of Alzheimer's disease. Additionally, it would have been obvious to have employed the monitoring methods of Schumacher to gauge the effectiveness of the medicament. Thus, based on the reasons of record, the instant claims are deemed unpatentable over the cited art.

### ***Conclusion***

Claims 12-14 are not allowed.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to SAHAR JAVANMARD whose telephone number is (571) 270-3280. The examiner can normally be reached on 8 AM-5 PM MON-FRI (EST).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sreeni Padmanabhan can be reached on (571) 272-0629. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

/S. J./

Examiner, Art Unit 1617

/SREENI PADMANABHAN/

Supervisory Patent Examiner, Art Unit 1627